

Geology 1-Physical Geology Laboratory Manual

Roughly three hours of class time will be devoted to discussion and laboratory work each week. The purpose of these meetings is three-fold:

1. They will provide you will an opportunity to ask questions about any part of the text or lecture material that you do not understand, or to discuss problems from the previous laboratory exercise that you find interesting or confusing.
2. They allow your instructor to test your understanding of the previous lab exercise through the medium of a quiz.
3. The lab exercises will acquaint you with a few of the materials and problems encountered in geology with some of the techniques used by geologists by giving you hands on experience with subjects discussed during lecture.

You are expected to carefully read and be thoroughly familiar with the lab exercise and the assigned reading in the text before coming to the lab session.

The results of the lab work should be recorded on the pages provided for that purpose in this manual and handed in upon completion of each exercise. They will be returned to you in the following week. Although debate and discussion of laboratory problems is encouraged, each of you must learn to observe and think independently and to draw your own conclusions. Your lab reports should be the product of your own independent work, thought and judgment.

You will find that the text and this manual are essential items in each lab session. You will also need, for many labs, a small hand magnifying lens, pencil, colored pencils, ruler and eraser.

You will be using laboratory materials including samples of rocks and minerals, geologic and topographic maps, and other types of materials. We encourage you to use these, examine and handle them, and learn from them, *but we also urge you not to abuse or destroy them as they must be used by other classes*, both this semester and in the future. From time to time, special geological materials will be on display in the lab for your use, but again we ask you to handle them with care.

Under no circumstances are laboratory materials to be removed without express permission from your instructor!

Geology Lab rules and use agreement

We appreciate your cooperation in preserving our laboratories for use by present and future students. In order to do so, we ask that you read the following rules and adhere to them while using these facilities.

Lab table tops are end-grain wood and are very difficult to refinish. Please take care when moving rock samples on the tables. Doodling, writing notes or carving your initials are absolutely forbidden and grounds for dismissal from class.

Anyone found defacing the tables in any way is subject to repair costs and dismissal from class.

Mineral sets should contain 45 numbered specimens, a streak plate and 9 hardness minerals. Return numbered minerals to their proper place in the tray. The set itself should be returned to its corresponding shelf.

Rock sets should contain 25 specimens for IGNEOUS (space 3 has two), 20 for METAMORPHIC and 20 for SEDIMENTARY. When returning the set to the shelf, please see that specimens are resting as flat as possible to prevent jamming of the drawer in the shelf. And make sure that the handle is facing out.

Report any missing minerals or rocks to your instructor immediately. Failure to do so will result in your being held responsible for the loss.

A financial hold will be placed on your records if you are responsible for any damage or loss and you do not settle with the lab tack before completion, drop, or withdrawal from class

Complete the following page and return to your instructor prior to the 2nd class meeting.

GEOLOGY 1 LAB AGREEMENT

I accept responsibility for the materials named below.

I have read and fully understand the rules for lab use and agree to strictly observe them.

NAME _____ (please print)

INSTRUCTOR _____ CLASS SECTION (DAY/TIME) _____

MINERAL SET _____ ROCK SET _____

PHONE _____

HOME
ADDRESS _____

SIGNATURE _____

STUDENT ID _____